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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,499	12/12/2005	Jill MacDonald Boyce	PU040018	3191

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Robert D. Shedd, Patent Operations  
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EXAMINER
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THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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11/19/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,499	<b>Applicant(s)</b> BOYCE, JILL MACDONALD	
	<b>Examiner</b> James A. Thompson	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2010 and 01 November 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The Information Disclosure Statement (PTO-1449) of 21 September 2010 has been fully considered by Examiner. A signed, initialed and dated copy is included with the present action.

### ***Response to Arguments***

2. Applicant's arguments filed 01 November 2010 have been fully considered but they are not persuasive.

**Regarding page 4, lines 1-15:** Examiner notes the co-pending applications. Further, Examiner has fully considered and fully addressed Applicant's amendments and arguments below.

**Regarding page 4, line 16 to page 6, line 19:** Applicant argues that Nakagawa (EP 0 883 299 A2) is directed to an encoding method, rather than a decoding method.

Examiner replies that the apparatus taught by Nakagawa performs both encoding and decoding, as discussed in the Abstract of Nakagawa and column 8, lines 38-50 of Nakagawa. In figure 1 of Nakagawa, decoding elements are shown explicitly. For example, element 11 is a dequantization and inverse orthogonal transformation unit, and element 12 is a decoded picture generator. While an output video stream is ultimately encoded, decoding is part of the overall apparatus and method shown in figure 1 of Nakagawa. Further, figure 2 of Nakagawa explicitly shows a decoder which accepts a coded video bitstream and output a decoded video stream to a

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video display. Other aspects of decoding are shown throughout the Nakagawa reference. The portions specifically relied upon by Examiner require the use of decoding.

**Regarding page 6, line 20 to page 8, line 9:** Applicant argues that the newly added limitations of claims 1 and 8 are not taught by Nakagawa.

Examiner replies that Applicant is correct in that Nakagawa does not fully teach claims 1 and 8 as now amended by Applicant. However, additional prior art has been discovered which renders claims 1 and 8 obvious to one of ordinary skill in the art at the time of the invention. Accordingly, new grounds of rejection necessitated by Applicant's amendments are set forth below.

**Regarding page 8, lines 10-20:** Applicant argues that claims 2-7 and 9 are allowable due to their respective dependencies from allegedly allowable claims.

Examiner replies that claims 1 and 8 are shown to be obvious over the prior art. Thus, claims 2-7 and 9 cannot be deemed allowable merely due to their respective dependencies.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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- a. Determining the scope and contents of the prior art.
- b. Ascertaining the differences between the prior art and the claims at issue.
- c. Resolving the level of ordinary skill in the pertinent art.
- d. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

**Nakagawa (EP 0 883 299 A2) in view of Oguz (US-6,771,703).**

**Regarding claim 1:** Nakagawa discloses a spatial scalable video decoder for receiving each of a standard-resolution bitstream and a high-resolution scalable bitstream (**fig. 1 and column 4, lines 36-45 of Nakagawa – input video can be high resolution; selector determines if input video is to be encoded as high resolution or standard resolution**) and providing a high-resolution video sequence (**column 6, line 55 to column 7, line 4 of Nakagawa – both low resolution and high resolution video sequences are provided based on the resolution selection**), the decoder comprising: an I-picture detector for receiving the standard-resolution bitstream (**column 5, lines 22-29 of Nakagawa – standard resolution I-pictures are detected and stored, and are later used to reconstruct high resolution images**); a standard-resolution Intra decoder in signal communication with the I-picture detector for decoding standard-resolution I-pictures to provide decoded standard-resolution I-pictures (**column 5, lines 22-27 of Nakagawa – standard-resolution I-pictures are decoded and stored as standard-resolution pictures; stored standard-resolution I-pictures are later converted to high resolution images**); a high-resolution video decoder for receiving the high-resolution scalable bitstream (**column 4, lines 48-50 and lines 54-58; and column 5, line 56 to column 6, line 2 of Nakagawa**); and a selector in signal communication with the standard-resolution Intra video decoder and the high-resolution video decoder for selecting between the outputs from the standard-resolution Intra video decoder and

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the high-resolution video decoder to provide the high-resolution video sequence (**column 6, lines 50-58 of Nakagawa**).

Nakagawa does not disclose expressly that the standard-resolution I-pictures are *non-scalably* decoded.

Oguz discloses non-scalably decoding standard-resolution I-pictures (**fig. 10(185); column 15, line 60 to column 16, line 2; and column 40, lines 37-39 of Oguz**).

Nakagawa and Oguz are analogous art because they are from the same field of endeavor, namely digital video data encoding/decoding and processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use non-scalable decoding for the standard resolution I-pictures. The suggestion for doing so would have been that using scalable decoding versus using non-scalable decoding is a tradeoff between quality and efficient streaming, which one of ordinary skill would apply according to the user's needs (**column 2, lines 32-51 of Oguz**). Therefore, it would have been obvious to combine Oguz with Nakagawa to obtain the invention as specified in claim 1.

**Regarding claim 2:** Nakagawa discloses an I-picture indicator in signal communication between the standard-resolution Intra decoder and the selector (**column 5, lines 22-29 and column 5, line 56 to column 6, line 5 of Nakagawa** – *selector selects which resolution is to be used and, if it is standard resolution, the Intra decoder decodes the standard-resolution I-pictures so that high-resolution I-pictures can be reconstructed*).

**Regarding claim 3:** Nakagawa discloses an I-picture selector in signal communication with the I-picture detector (**column 6, line 55 to column 7, line 23 of Nakagawa** – *I-pictures*

*from the standard-resolution bitstream can be used or, if high-resolution is selected, high-resolution I-pictures are used for reconstructing the output video data stream).*

**Regarding claim 4:** Nakagawa discloses an upsampler in signal communication with the standard-resolution Intra decoder (**column 5, lines 4-9 of Nakagawa**).

**Regarding claim 5:** Nakagawa discloses a summing unit in signal communication with the high-resolution decoder (**column 7, line 54 to column 8, lines 2 of Nakagawa**).

**Regarding claim 6:** Nakagawa discloses high-resolution frame stores in signal communication with the high-resolution decoder (**column 4, lines 48-50 of Nakagawa**).

**Regarding claim 7:** Nakagawa discloses wherein the high-resolution frame stores is in signal communication with the selector for receiving the high-resolution video sequence (**column 4, lines 54-58 of Nakagawa**).

**Regarding claim 8:** Nakagawa discloses a decoding method for providing spatial scalable decoded video data (**fig. 1 and column 4, lines 36-53 of Nakagawa**), the method comprising: receiving a standard-resolution bitstream (**column 4, lines 51-53 and column 5, lines 22-29 of Nakagawa**); receiving a high-resolution scalable bitstream (**column 4, lines 48-50 and column 5, line 56 to column 6, line 2 of Nakagawa**); Intra decoding standard-resolution I-pictures from the standard-resolution bitstream to provide decoded standard-resolution I-pictures (**column 5, lines 22-27 of Nakagawa** – *standard-resolution I-pictures are decoded and stored as standard-resolution pictures; stored standard-resolution I-pictures are later converted to high resolution images*); up-sampling the decoded I-picture to high-resolution (**column 5, lines 4-9 of Nakagawa**); high-resolution decoding a current picture from the high-resolution scalable bitstream (**column 4, lines 48-50 and lines 54-58; and column 5, line 56 to column 6, line 2 of**

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**Nakagawa**); and summing the decoded current picture with the up-sampled I-picture (**column 7, line 54 to column 8, lines 2 of Nakagawa**).

Nakagawa does not disclose expressly that the standard-resolution I-pictures are *non-scalably* decoded.

Oguz discloses non-scalably decoding standard-resolution I-pictures (**fig. 10(185); column 15, line 60 to column 16, line 2; and column 40, lines 37-39 of Oguz**).

Nakagawa and Oguz are analogous art because they are from the same field of endeavor, namely digital video data encoding/decoding and processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use non-scalable decoding for the standard resolution I-pictures. The suggestion for doing so would have been that using scalable decoding versus using non-scalable decoding is a tradeoff between quality and efficient streaming, which one of ordinary skill would apply according to the user's needs (**column 2, lines 32-51 of Oguz**). Therefore, it would have been obvious to combine Oguz with Nakagawa to obtain the invention as specified in claim 8.

**Regarding claim 9:** Nakagawa discloses selecting one of the decoded current picture and the summed picture in response to an indication of the presence of an I-picture (**column 6, line 50 to column 7, line 4 of Nakagawa – based on characteristics of I-picture and selected resolution mode, the high-resolution video picture is selected or the low-resolution video picture, later used to reconstruct the high-resolution video picture, is selected**); and outputting the selected picture in a high-resolution video sequence (**column 8, lines 38-50 of Nakagawa**).



***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Faibish et al., US-2003/0147561, Published 07 August 2003, Filed 18 September 2001.
- b. Haskell et al., US-5,619,256, Patented 08 April 1997.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A Thompson/  
Primary Examiner, Art Unit 2625

17 November 2010